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DESCRIPTION OF AN *ANAGARICOPHILUS* (COLEOPTERA: ENDOMYCHIDAE) LARVA FROM MADAGASCAR

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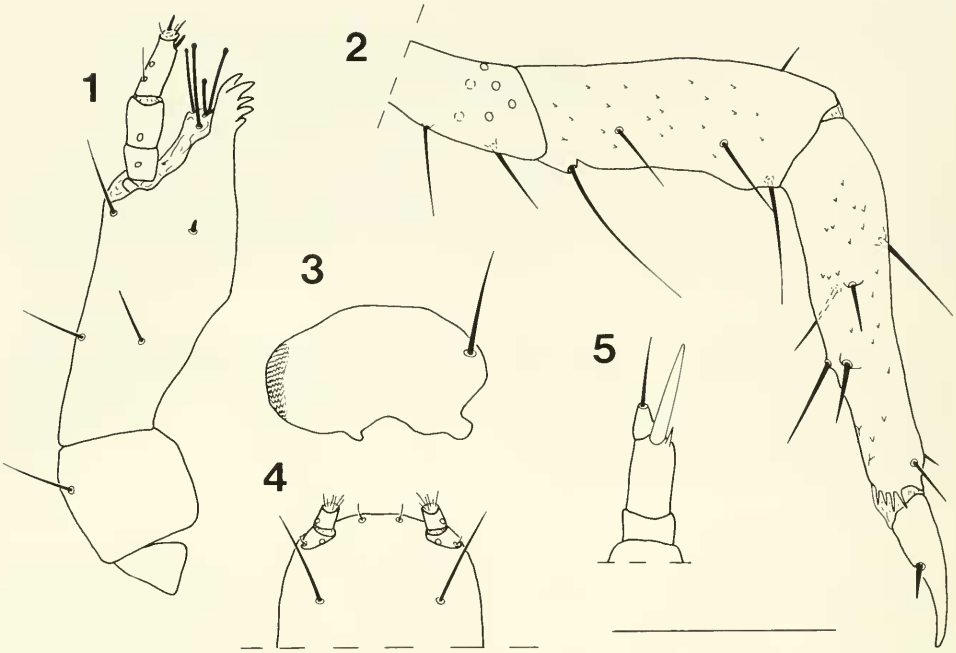
Abstract.—The larva of an undetermined species from Madagascar of the endomychid genus *Anagaricophilus* is described and illustrated. Adults and associated larvae were collected from a compost pile. This larva is compared with other described mychothenine larvae.

Arrow (1922) described the genus *Anagaricophilus* based on a single species, *A. pulchellus* Arrow, from the Seychelles. Subsequent workers (Strohecker, 1974, 1979; Vinson, 1950) described additional species of this genus which presently contains ten species from Madagascar, Mauritius, and the Seychelles. These workers placed *Anagaricophilus* in the subfamily Mycetaeinae, along with a variety of other forms, based on its small size and reduced tarsal formula. Sasaji (1978) separated *Anagaricophilus* and placed it in a new subfamily, the Mychotheninae, based on the anterior arms of the tentorium not being fused and by the laterally closed mesocoxal cavities. In addition to *Anagaricophilus,* this subfamily includes *Baeochelys, Bryodryas, Bystodes, Bystus, Clemmus, Dexialia, Dialexia, Exysa, Idiophyes, Malagaricophilus, Mychothenus,* and *Symbiotes.*

Little is known about the habitat of mychothenine Endomychidae. Species from many genera have been taken from forest debris, and the gut of the *Anagaricophilus* larva described below was filled with unidentifiable spores of Fungi Imperfecti. Published references to mychothenine larvae are scarce: *Bystus ulkei* (Crotch) is figured by Böving and Craighead (1931), *Bystus* sp. is figured by Lawrence (in press), and *Mychothenus asiaticus* Sasaji is figured and described in detail (Sasaji, 1978). Mychothenine larvae are distinguished from other endomychid larvae by the following characters: body without tergal plates and with simple setae only; reduced, transverse mandible without incisor lobe and with tubercles arranged in distinct rows on mola; maxillary mala falciform; head without frontal sutures or stemmata. The absence of paired spatulate setae on the tibiae and a relatively long third antennal segment separates *Anagaricophilus* from *Mychothenus. Anagaricophilus* is similar to the illustrations of *Bystus* except for the relative lengths of the antennal segments. In *Bystus* segments 1 and 3 are subequal in length and segment 2 is about three times longer than 1 and 3 combined. *Anagaricophilus* differs from both genera, however, by the presence of capitate setae on the maxillary mala. I reject Sasaji's (1978) interpretation of the maxilla; he refers to a separate galea and lacinia, but I prefer to interpret the falciform process as a modification of the mesal margin of the mala.



Figs. 1–5. *Anagaricophilus* sp., larva. 1, Maxilla. 2, Front leg. 3, Mandible. 4, Labium, distal portion. 5, Antenna. Scale line = 0.1 mm.

Seven larvae of an undetermined species of *Anagaricophilus* were taken with about 100 associated adults with the following collecting data: Madagascar, Tananarive Prov., Antananarivo, Parc de Tsimbazaza, 25 October 1984, in compost pile, Robert W. Brooks. Adults and larvae of this species are deposited in the Snow Entomological Museum (University of Kansas).

Description of Late-Instar Larva of *Anagaricophilus* sp.

Figs. 1–5

Length about 1.8 mm; body oblong, flattened. Dorsum and venter lightly pigmented, with simple setae. Head large, about 1.6× wider than long; lateral margins strongly convergent posteriorly and toward labrum. Stemmata absent. Frontal sutures absent, fronto-clypeal suture present. Antenna (Fig. 5) 3-segmented; segment 2 longest. Ventral sensory appendage elongate, subequal in length to segment 3 and its terminal seta. Labrum transverse, about 2.0× wider than long. Mandible (Fig. 3) transverse, incisor lobe absent; mola well-sclerotized, with distinct rows of tubercles. Maxilla (Fig. 1) with juxtacardo triangular, cardo subquadrate, stipes elongate; mala falciform, with long capitate setae. Palpifer small; palp 3-segmented. Labium (Fig. 4) undivided, palps 2-segmented. Prothorax narrower than mesothorax, about 2.0× wider than long. Mesothorax and metathorax subequal in length, combined length only slightly longer than prothorax; metathorax as wide as prothorax. Legs (Fig. 2) 5-segmented. Trochanter large, elongate. Femur subcylindrical. Tibia long, narrow, about 1.4× longer than femur. Tarsungulus

unisetose. Abdominal terga 1–8 with dorsal annular spiracles. Segment 1 widest and longest. Segments 2–9 shorter and narrower than the preceding segment. Segment 10 reduced, ventrally positioned.

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